

Attorney Docket No. 50325-0085

#4 6-3-01 ROCEIP

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Group Art Unit No.: 2734

Itzhak Parnafes, et al.

Examiner: Not Yet Assigned

Serial No.: 09/586,531

Filed on: May 31, 2000

For: METHOD AND APPARATUS

PROVIDING AUTOMATIC RESV MESSAGE GENERATION FOR NON-RESV-CAPABLE NETWORK DEVICES

MAY 3 1 2001 Technology Center 2600

Commissioner for Patents
Office of the Initial Patent Examination
Customer Service Center
Washington, DC 20231

#### SECOND REQUEST FOR A CORRECTED FILING RECEIPT

Sir:

Please furnish the undersigned with a corrected filing receipt for the above-identified application. The corrections needed are as follows:

- (1) The claim count is incorrect. The correct claim count should read 22. In support of these changes, enclosed please find:
  - (a) a copy of the filing receipt with the incorrect claim count; and
- (b) a copy of the claims as filed, including 22 claims correctly numbered 1-22.

There have been no amendments to the claims after the original filing.

Attorney Docket No. 50325-0085

As evidenced by the attachments, it is evident that this error is not due to any fault of Applicants, therefore, no fee is due. Should the Commissioner deem that a fee is due, please charge Deposit Account 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Dated: February 12, 2001

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, Office of the Initial Patent Examintation, Customer Service Center, Washington, D.C. 20231 on February 13, 2001.

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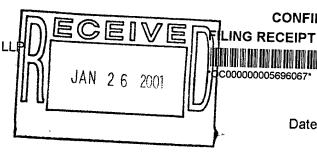
www.uspta.gov **DRAWINGS** TOT CLAIMS IND CLAIMS

21

**CONFIRMATION NO. 6019** 

APPLICATION NUMBER FILING DATE GRP ART UNIT FIL FEE REC'D ATTY.DOCKET.NO 09/586,531 05/31/2000 2734 858 50325-0085

Hickman Palermo Truong & Becker LL 1600 Willow Street San Jose, CA 95125-5106



Date Mailed: 01/22/2001

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DATES:

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Shai Mohaban, Sunnyvale, CA; Itzhak Parnafes, Cupertino, CA;

Continuing Data as Claimed by Applicant

**Foreign Applications** 

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MAY 3 1 2001

**Technology** Center 2600

If Required, Foreign Filing License Granted 07/28/2000

**Projected Publication Date:** 

Non-Publication Request: No

Early Publication Request: No

Title

Method and apparatus providing automatic resv message generation for non-resv-capable network devices

Preliminary Class

375

Data entry by : SAHLE, ALMAZ

Team : OIPE

Date: 01/22/2001

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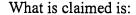
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Any corrections that may need to be done to your Filing Receipt should be directed to:

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#### CLAIMS







- A method of establishing a network resources reservation for an anticipated traffile 1 1. 2 flow along a path in a network between an anticipated source and an anticipated 3 receiver of the traffic flow, wherein the anticipated receiver otherwise cannot 4 facilitate establishing the network resources reservation, the method comprising 5 the steps of: 6 detecting an RSVP Path message associated with the anticipated receiver of the 7 anticipated traffic flow at a proxy node located within the path; 8 determining whether to establish the network resources reservation; 9 generating an RESV message to reserve network resources for the anticipated 10 traffic flow; and 11 communicating the RESV message to the anticipated source of the anticipated 12 traffic flow.
- A method as recited in claim 1, further comprising the step of determining one or more device and traffic parameter values associated with the anticipated traffic flow, and wherein the step of generating the RESV message comprises the step of generating the RESV message based on at least one of the device and traffic parameter values.
- 1 3. A method as recited in claim 1, further comprising the steps of:
- 2 receiving predefined policy information;
- generating the RESV message based on the predefined policy information.
- 1 4. A method as recited in claim 1, wherein the step of determining whether to initiate 2 an RSVP reservation process includes the steps of:
- determining one or more network parameter values associated with the anticipated traffic flow;

)		determining one or more transport parameter values associated with the
6		anticipated traffic flow;
7		determining next and previous hop parameter values associated with the
8		anticipated traffic flow; and
9		correlating at least one of the ascertained network parameter, transport parameter
10		next hop parameter, and previous hop parameter values with information
11		defining a relationship between them and whether a RESV message is
12		desired.
1	5.	A method as recited in claim 4, wherein determining the network parameter value
2		and ascertaining the transport parameter values includes the steps of determining
3 .		at least one of the source and receiver IP addresses, source and receiver port
4		numbers, and transport protocol based on values carried in objects in the RSVP
5		Path message.
1	6.	A method as recited in claim 4, wherein determining the anticipated traffic flow
2		characteristics includes determining at least one of the rate and size of packets
3		associated with the anticipated traffic flow.
1	7.	A method as recited in claim 4, further comprising the steps of extracting one or
2		more additional anticipated traffic flow attributes from the RSVP Path message.
1	8.	A method as recited in claim 7, wherein the anticipated receiver is an IP phone,
2		and further comprising the step of determining at least one quality of service
3		parameter associated with the anticipated traffic flow.
l	9.	A method as recited in claim 1, further comprising the steps of:
2		communicating the RESV message along at least a subset of an anticipated path
}		defined, at least in part, by the RSVP Path message;
<b>,</b>		receiving the RSVP Path message at one or more devices along the anticipated
,		path.

1	10.	A method as recited in claim 1, wherein the step of detecting an RSVP Path
2		message comprises the step of detecting an RSVP Path message associated with
3		the anticipated receiver of the anticipated traffic flow at a proxy node that is
4	•	logically positioned adjacent to the path.
1	11.	A computer readable medium comprising one or more sequences of instructions
2		for facilitating an RSVP reservation process, for an anticipated traffic flow
3		anticipated to be received by an anticipated receiver that cannot facilitate an RSVP
4		reservation process for the anticipated traffic flow, wherein when the instructions
5		are executed by one or more processors, the instructions cause the one or more
6		processors to carry out the steps of:
7		detecting an RSVP Path message associated with the anticipated receiver of the
8		anticipated traffic flow at a proxy node located within the path;
9		determining whether to establish the network resources reservation;
0		generating an RESV message to reserve network resources for the anticipated
1		traffic flow; and
2		communicating the RESV message to the anticipated source of the anticipated
3		traffic flow.
1	12.	A computer-readable medium as recited in claim 11, further comprising the step of
2		determining one or more device and traffic parameter values associated with the
3		anticipated traffic flow, and wherein the step of generating the RESV message
4		comprises the step of generating the RESV message based on at least one of the
5		device and traffic parameter values.
1	13.	A computer-readable medium as recited in claim 11, further comprising the steps
2		of:
3		receiving predefined policy information;

generating the RESV message based on the predefined policy information.

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1	14.	14. A computer-readable medium as recited in claim 11, wherein the step of					
2		determining whether to initiate an RSVP reservation process includes the steps of					
3		determining one or more network parameter values associated with the anticipated					
4		traffic flow;					
5		determining one or more transport parameter values associated with the					
6		anticipated traffic flow;					
7		determining next and previous hop parameter values associated with the					
8		anticipated traffic flow; and					
9		correlating at least one of the ascertained network parameter, transport parameter,					
0		next hop parameter, and previous hop parameter values with information					
1		defining a relationship between them and whether a RESV message is					
2		desired.					
1	15.	A computer-readable medium as recited in claim 14, wherein determining the					
2		network parameter values and ascertaining the transport parameter values includes					
3		the steps of determining at least one of the source and receiver IP addresses,					
4		source and receiver port numbers, and transport protocol based on values carried					
5		in objects in the RSVP Path message.					
1	16.	A computer-readable medium as recited in claim 14, wherein determining the					
2		anticipated traffic flow characteristics includes determining at least one of the rate					
3		and size of packets associated with the anticipated traffic flow.					
1	17.	A computer-readable medium as recited in claim 14, further comprising the steps					
2		of extracting one or more additional anticipated traffic flow attributes from the					
3		RSVP Path message.					
1	18.	A computer-readable medium as recited in claim 17, wherein the anticipated					
2		receiver is an IP phone, and further comprising the step of determining at least one					
3	•	quality of service parameter associated with the anticipated traffic flow.					

1	19.	A computer-readable medium as recited in claim 11, further comprising the steps
2		of:
3		communicating the RESV message along at least a subset of an anticipated path
4		defined, at least in part, by the RSVP Path message;
5		receiving the RSVP Path message at one or more devices along the anticipated
6		path.
1	20.	A computer-readable medium as recited in claim 11, wherein the step of detecting
2		an RSVP Path message comprises the step of detecting an RSVP Path message
3		associated with the anticipated receiver of the anticipated traffic flow at a proxy
4		node that is logically positioned adjacent to the path.
1	21.	A system for establishing a network resources reservation for an anticipated traffic
2		flow along a path in a network between an anticipated source and an anticipated
3		receiver of the traffic flow, wherein the anticipated receiver otherwise cannot
4		facilitate establishing the network resources reservation, the system comprising:
5		means for detecting an RSVP Path message associated with the anticipated
6		receiver of the anticipated traffic flow at a proxy node located within the
7		path;
8		means for determining whether to establish the network resources reservation;
9		means for generating an RESV message to reserve network resources for the
0		anticipated traffic flow; and
1		means for communicating the RESV message to the anticipated source of the
2		anticipated traffic flow.
1	22.	A network device that can establish a network resources reservation for an
2		anticipated traffic flow along a path in a network between an anticipated source
3		and an anticipated receiver of the traffic flow, wherein the anticipated receiver
4		otherwise cannot facilitate establishing the network resources reservation, the
5	•	network device comprising:

6	a network interface;
7	a processor coupled to the network interface and receiving network messages from
8	the network through the network interface;
9	a computer-readable medium comprising one or more stored sequences which,
10	when executed by the processor, cause the processor to carry out the steps
11	of:
12	detecting an RSVP Path message associated with the anticipated receiver
13	of the anticipated traffic flow at a proxy node located within the
14	path;
15	determining whether to establish the network resources reservation;
16	generating an RESV message to reserve network resources for the
17	anticipated traffic flow; and
18	communicating the RESV message to the anticipated source of the
19	anticipated traffic flow.

AO

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**CONFIRMATION NO. 6019** 

SERIAL NUMBER 09/586,531	FILING DATE 05/31/2000 RULE	CLASS 375	GROUP AI 2734		ATTORNEY DOCKET NO. 50325-0085		
APPLICANTS Shai Mohaban, Itzhak Parnafes,	Sunnyvale, CA; Cupertino, CA;						
** CONTINUING DA	ATA ***********	*****					
** FOREIGN APPLI	CATIONS *********	*****					
IF REQUIRED, FOR GRANTED ** 07/28/	EIGN FILING LICENS 2000	<b>SE</b>					
Foreign Priority claimed 35 USC 119 (a-d) conditions met Verified and	yes no no Met afte	STATE OR COUNTRY	SHEETS DRAWING 7	TOTAL CLAIM 22			
Acknowledged Exa ADDRESS Hickman Palermo True 1600 Willow Street San Jose, CA 95125-5	ong & Becker LLP	tials .					
TITLE							
Method and apparatus	providing automatic resv	message generation for	non-resv-cap	able networl	k devices		
				All Fees			
				1.16 Fees ( Filing )			
RECEIVED No.	S: Authority has been give	lit DEPOSIT ACCOUN		1.17 Fees ( Processing Ext. of time )			
858 No.	for following:		I I I	1.18 Fees (Issue)			
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